

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 15501PCT00	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416)	
International application No. PCT/DK03/00155	International filing date (day/month/year) 12.03.2003	Priority date (day/month/year) 13.03.2002
International Patent Classification (IPC) or both national classification and IPC G06K11/08		
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- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 7 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

- This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☒ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 06.10.2003	Date of completion of this report 17.12.2003
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Quesson, C Telephone No. +49 89 2399-2667 

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EXAMINATION REPORT**

International application No. **PCT/DK03/00155**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-27 as published

Claims, Numbers

1-60 as published

Drawings, Sheets

1/6-6/6 as published

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees, the applicant has:

- ☒ restricted the claims.
☐ paid additional fees.
☐ paid additional fees under protest.
☐ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
☒ not complied with for the following reasons:

see separate sheet

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☐ all parts.
☒ the parts relating to claims Nos. 1-26,34-60 .

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-26,34-60
	No: Claims	
Inventive step (IS)	Yes: Claims	1-26,34-60
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-26,34-60
	No: Claims	

2. Citations and explanations

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see separate sheet

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Re Item IV

LACK OF UNITY OF INVENTION

1. The International Preliminary Examination Authority considers that the requirement of unity of invention (Rule 13 PCT) is not met. The two separate inventions/groups of invention are:

- i) Claims 1-26: a touch pad; Claims 34-60 : a method of operating a touch pad; whereby the touch pad may comprise a stylus or pen for use with the touch pad (claim 26) and the method of operating the may comprise translating a stylus or pen (claim 26) ;
- ii) Claims 27-32: a stylus for use in the touch pad according to claims 1-26; Claim 33: a stylus or pen.

2. The two separate inventions/groups of invention are not so linked as to form a single general inventive concept (Rule 13.1 PCT) for the following reasons:

Each of the documents cited in the search report discloses a touchpad.

The STF (Special Technical Feature) of subject i, as defined in Rule 13.2 PCT may be formulated as the special combination of features of the touchpad;

The objective problem is to improve in some way existing touchpads.

The STF (Special Technical Feature) of subject ii consists in the special combination of features of the stylus or pen;

The objective problem here is to improve in some way existing pen or stylus.

The above analysis shows that the STFs of the different groups of inventions are not the same. A comparison of the objective problems related to the different groups of inventions all seen in the light of the description and drawings of the application shows that they are all different and have no corresponding technical effects.

3. In conclusion, each of the two separate inventions or groups of inventions can be applied independently, such they are not linked by a common general inventive concept.

Hence the **application does not meet the requirements of Unity of Invention** as defined in Rule 13(1)&(2) PCT.

4. As apparent from the search report, it would appear that the search has been

performed on all claims of the international application.

As requested by the applicant, this International Preliminary Examination Report has been established on claims of the first group of claims defined above.

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following document/s/:

D1:US-A-4 688 933 (LAPEYRE JAMES M) 25 August 1987 (1987-08-25)

D2:US-A-5 166 668 (AOYAGI TETUJI) 24 November 1992 (1992-11-24)

1.1. D1 describes a position determining system providing signals representative of the positions of a stylus movable within the area of the tablet and comprising two photodetectors spaced along a base line by a predetermined distance. A unit is associated with each photodetector to provide a movable narrow field of view for each photodetector. The angular position of each of the fields of view is monitored with respect to the base line and a signal indication of the respective angular positions is provided. A stylus having a light emitter at the tip thereof is movable within the area of the tablet and provides light detachable by each of the photodetectors. Each of the photodetectors provides a respective signal when the field of view of the corresponding photodetector receives light from the emitter.

1.2. D2 discloses a wireless input device for computer which comprises a pen-type input device having a source of light capable of transmitting pulses. Two light receiving elements are provided and these light receiving element are disposed for detecting an incident angle of light inputted from the source of light. The wireless input device also has an input unit body having an operational unit for calculating the position of the pen-type input device on the basis of a ratio of the difference in quantities to the sum of light quantities received from the pen-type input unit, the predetermined distance between the two light receiving elements, and the predetermined inclination angle of the light receiving elements. The cursor control unit has an input stage (4) that connects to the computer by a cable in the manner of a prior art 'mouse' unit. Built into the stage are position detecting devices of an opto electronic type, e.g. CCD elements, (20b,21b). Lenses (20a, 21a) are positioned in front of the devices. The cursor is positioned on the screen of a VDU dependent upon the input provided by an light pen

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(5) that has an LED output stage. The cylindrical body of the pen has snap action switch buttons for actuation purposes.

2. The application satisfies the requirements of Article 33(1) PCT, because the combination of features of independent claims 1 and 34 is neither taught nor suggested by the available prior art documents.

CERTAIN DEFECTS IN THE INTERNATIONAL APPLICATION

1. Although a number of prior art documents (including D2) are cited at page 1, the requirements of Rule 5.1 (a)(ii) PCT are not fulfilled, because the introduction to the description does not acknowledge the document D1 cited in the search report and discuss the relevant background art disclosed in the closest prior art documents, Rule 5.1 (a)(ii) PCT, sufficiently for a fair acknowledgment of all known features. The introduction to the description should also have been amended, based on the application as filed, to:

- clearly identify the problem to be solved by the present invention;
- specify the technical differences between the prior art and the subject matter of the claims; and
- indicate how these differences provide the solution to the problem to be solved.

2. The argumentation of the applicant in his reply, following which the two-part form of independent claims as recommended by Rule 6.3(b) PCT is inappropriate in the present case, appears convincing.

However, the applicant should ensure that it is clear from the description which feature/s of the subject-matter of any independent claim is/are known from the prior art; see PCT Guidelines PCT/GL/3 III, 2.3a.

CERTAIN OBSERVATIONS ON THE INTERNATIONAL APPLICATION - CLARITY

1. The features of the claim/s are not provided with reference signs placed in parentheses, relating to the drawings to increase their intelligibility (Rule 6.2(b) PCT).